

**Notice of Allowability**

Application No.

10/619,649

Examiner

Mujtaba K. Chaudry

Applicant(s)

HETZLER ET AL.

Art Unit

2112

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 2/25/2007.
2. ☒ The allowed claim(s) is/are 1-7, 10-25 and 45-65.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 1.19(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.


**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date 2/25/2007
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date 4/23/2007
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
**GUY LAMARRE**  
**PRIMARY EXAMINER**

 4/23/07

### DETAILED ACTION

Applicants' response to *Ex parte Quayle* action was received February 25, 2007.

- Claims 1-7, 10-25 and 45-65 remain active.
- Drawings are accepted.
- Specification is accepted.
- Claim objections and rejections are withdrawn.
- IDS filed are considered. PTO 1449 is attached.
- International Search Report considered; Examiner's form PTO-892 attached.

Application allowed.

### *Reasons for Allowance*

Claims 1-7, 10-25 and 45-65 are allowed. The following is a statement of reasons for the indication of allowable subject matter:

Independent claim 1 of the present application teaches, for example, a method for increasing failure tolerance of a storage system having a plurality of arrays, each array having a plurality of storage units, the method comprising steps of: selecting a recipient array from the plurality of arrays; selecting a donor array from the plurality of arrays when a difference between a minimum Hamming distance of the donor array and a minimum Hamming distance of recipient array is greater or equal to 2; selecting a donor storage unit in the donor array; and rebuilding at least a portion of lost recipient information from the recipient array on the selected storage unit in the donor array. The prior arts of record do not teach nor fairly suggest the foregoing

Art Unit: 2112

limitations. Particularly, the prior arts of record do not teach or suggest, "...*selecting a donor array from the plurality of arrays when a difference between a minimum Hamming distance of the donor array and a minimum Hamming distance of recipient array is greater or equal to 2*;  
selecting a donor storage unit in the donor array; and rebuilding at least a portion of lost recipient information from the recipient array on the selected storage unit in the donor array." These limitations are not obvious over the prior arts of record and are believed to be novel.

Independent claim 45 recites similar limitations as those found in claim 1 and therefore is allowable as well.

Dependent claims 2-7, 10-25 and 46-65 depend from independent claims 1 and 45 and inherently include the limitations therein and therefore are allowable as well.

Art Unit: 2112

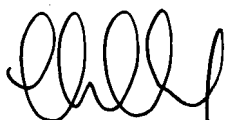
***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mujtaba K. Chaudry whose telephone number is 571-272-3817.

The examiner can normally be reached on Mon-Fri 9-7:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jacques Louis-Jacques can be reached on 571-272-6962.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Mujtaba Chaudry  
Art Unit 2112  
April 23, 2007

  
GUY LAMARRE  
PRIMARY EXAMINER